UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

January 3, 2012

Candace McKinley
Environmental Program Manager
Bureau of Reclamation
Columbia-Cascades Area Office
1917 Marsh Road
Yakima, Washington 98901-2058

Re: Comments on the proposed Yakima River Basin Integrated Water Resource Management Plan and Draft Programmatic EIS (EPA Project Number: 11-4131 BOR).

Dear Ms. McKinley:

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Bureau of Reclamation (Reclamation) and Washington State Department of Ecology (Ecology) Draft Programmatic Environmental Impact Statement (DPEIS) for the proposed Yakima River Basin Integrated Water Resource Management Plan (Integrated Plan) in Washington State.

The DPEIS analyzes potential environmental impacts associated with a plan integrating various approaches to water resources and ecosystem restoration improvements, including reservoir fish passage, changes to existing facilities, surface and ground water storage, enhanced water conservation, habitat/watershed protection and enhancement, and market reallocation. Analysis of impacts resulting from these strategies considered two action alternatives, a No Action and Integrated Plan. Under the No Action, there would be no implementation of the proposed Integrated Plan and current water demands in the Yakima basin would remain. The Integrated Plan would meet the water needs using three water management components i.e., Habitat, Systems Modification, and Water Supply; and incorporating seven elements (p. iv-v) in the Plan to improve water resources in the basin. The DPEIS does not identify a preferred alternative.

The EPA supports Reclamation's efforts to develop the proposed Integrated Plan, which can serve as a guide for development of future individual plans and projects. We agree that individual plans and projects included in the Integrated Plan should be subject to further NEPA analysis prior to their implementation. Section 1.7 of the DPEIS also discusses how the Integrated Plan builds on projects previously analyzed under NEPA. We note with appreciation that the PDEIS includes responses to public scoping comments on the project. We also appreciate that the Integrated Plan results from a Workgroup (YRBWEP) established to assist with planning on a range of issues, including measures to reduce potential impacts of the proposed program.

Overall, the DPEIS includes a good description of resources within the project area, analysis of anticipated environmental impacts, measures to offset the impacts, and an adaptive approach to review and adjust the Plan commensurate with changed conditions and new information. Our concerns with

Implementing the Integrated Plan as proposed relate to its potential impacts to water quality, wetlands and riparian areas, and habitat as explained below. We recommend that Reclamation continue to work with Ecology to ensure that the project would meet State water quality standards. As there are fish bearing streams in the project area, including species that are listed as endangered, threatened, sensitive and candidate for listing, Reclamation should also coordinate with Washington State Department of Fish and Wildlife to define water management practices that would be protective of fisheries within streams in the project area, especially those that are water quality limited. Based on our review and concerns about water quality, we have assigned a rating of EC-2 (Environmental Concerns – Insufficient Information) to the DPEIS. For your reference, a copy of the rating system used in conducting our review is enclosed.

We appreciate the opportunity to review and comment on this PDEIS. If you have questions about our comments, please contact me at (206) 553-1601 or by electronic mail at reichgott.christine@epa.gov or contact Theo Mbabaliye of my staff at (206) 553-6322 or by electronic mail at mbabaliye.theogene@epa.gov.

Sincerely,

Eric Peterson for

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosure:
Detailed EPA Comments on the Yakima River Basin Integrated Water Resource Management Plan and Draft Programmatic EIS

cc: EPA Washington Operations Office
Washington State Department of Fish and Wildlife

Detailed EPA Comments on the Yakima River Basin Integrated Water Resource Management Plan and Draft Programmatic EIS

Surface Water Impacts and Wetlands

The DPEIS identifies impaired waters in the project area and provides information about the status of applicable Total Maximum Daily Loads (TMDLs). Many streams and rivers in the project area are on the State of Washington's most current 303(d) list of impaired water bodies for a variety of water quality parameters, including temperature, dissolved oxygen (DO), turbidity, nutrients, total suspended solids (TSS), and toxins such as pesticides. Under the Wymer Dam and Pump Station, for example, there is a possibility that during dry years, releases of surface waters from the reservoir could result in warmer water temperatures in Yakima River, especially in August and September, and that releases of bottom waters may adversely affect DO and nutrient levels. The reservoir would inundate palustrine wetlands, resulting in permanent loss of habitat.

Similarly, the Bumping Lake Reservoir Enlargement activities would inundate additional new wetland areas and cause decaying vegetation to increase the availability of nutrients in the reservoir and downstream waters. The Kachess Reservoir storage project would also require work on the reservoir bed, which would potentially disturb sediments and cause increased erosion and sedimentation. Other impacts related to construction of new reservoirs and renovation of others would include potential spills of hazardous materials used during construction and resultant discharge of pollutants in nearby waterways.

Recommendations:

- *The final PEIS should include information regarding the status of the Clean Water Act Section 401 certification process and conditions, and more specifics about the Water Quality Monitoring Plan to address water quality problems within impaired water bodies.*
- *The final PEIS should include maps identifying wetlands and riparian areas, describe impacts to those areas in quantitative and functional terms and discuss proposed mitigation in similar terms.*

Vegetation and Wildlife Impacts

The proposed Integrated Plan would result in adverse impacts to shrub-steppe habitat, which has low resilience to further environmental disturbance. With construction of reservoirs, significant areas could be disturbed, inundated and shrub-steppe habitat lost. These impacts would result from not only construction and use of the dam and reservoirs, but also access roads and realignment of others, and recreational developments.

Loss of shrub-steppe vegetation would also affect wildlife habitat, especially greater sage-grouse, which is a State-threatened species and candidate for listing under the Endangered Species Act (ESA). Another species that would be affected is the Ferruginous Hawk, which is listed as State-threatened and as an ESA species of concern. Wildlife would also be affected due to increased noise and traffic during

construction and maintenance of the dam and the reservoir. Access roads, pipelines, and utility corridors would serve as obstacles to animals migrating through the area such as deer or elk. Cleared corridors and roads deter terrestrial animals from crossing due to lack of cover, reduced forage and browsing opportunities, changes in wildlife migration patterns, and occasional human activity in these areas. While we note that some of the impacts would be indirect, others would be direct, cumulative and unavoidable.

Recommendation:

- *The final PEIS should discuss in greater detail the effect of corridors created as a result of construction of the dams, reservoirs, and pipelines on habitat fragmentation and the creation of edge effects favoring some species, including mitigation measures.*

Seismicity

Because the Yakima River basin lies within the Yakima Fold Belt that has experienced tectonic folding and faulting in the past, the potential for landslides and slope movement at Wymer site and potentially at other sites exists. Slopes can be inherently unstable due to weak underlying materials, or due to oversteepening or loading of existing stable slopes. Seepage from reservoirs may infiltrate both stable and unstable areas. The resultant increased pore pressures could reactivate landslides or initiate new ones along reservoir rims and abutments. A full Wymer Reservoir, for example, would result in groundwater seepage, which is expected to involve substantial volumes and high hydraulic conductivity, all of which could cause a rise of pore pressures and instability of low strength materials in the reservoir basin. Such seepage from Wymer has the potential to infiltrate currently stable areas and may increase pore pressures such that slopes could become unstable and slide, particularly during earthquakes.

Recommendations:

- *The final PEIS should include results of a seismic analysis for reservoirs, information about how seismicity was evaluated, and how it will be monitored and managed to minimize seismic impacts. A seismic map should either be referenced or included in the final PEIS along with information about appropriate seismic design and construction standards and practices that would be used to reduce seismic risks.*

- *The final PEIS should identify and map areas that are susceptible to landslides and slope movement in the project area, particularly where reservoirs would be constructed along with assessment of slope stability, and determination of factors of safety and appropriate mitigation measures.*

U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.